

I claim:

1. A process for continuously recovering a waste paint comprising:

feeding a booth-circulating water containing paint particles discharged from a paint booth to a first separation tank, and adding a dispersing agent and a floatation agent into the first separation tank to finely divide and disperse the paint particles for floating;

feeding a liquid containing the paint particles into a second separation tank to roughly separate a liquid containing paint flocculate and a liquid containing no paint flocculate by flocculating the paint particles to form the paint flocculate;

transferring the liquid containing paint flocculate roughly separated in the second separation tank to a foreign-matter separation tank to remove a foreign matter contained in the liquid containing paint flocculate by retaining the liquid in the foreign-matter separation tank; and

separating the paint flocculate from the liquid containing paint flocculate having been subjected to the removing treatment of the foreign matter to collect the paint flocculate.

2. A process for continuously recovering a waste paint as defined in claim 1, the separation of the liquid containing the paint flocculate and the liquid containing no paint flocculate being carried out by floating up the paint particles obtained from the first separation tank under application of pressure.

3. A process for continuously recovering a waste paint as defined in claim 1 or 2, the removal of the foreign matter being carried out by stirring the liquid containing paint flocculate in the foreign-matter separation tank  
5 to remove the foreign-matter floated on a surface of the liquid.

4. A process for continuously recovering a waste paint as defined in any of claims 1 to 3, the separation of the paint flocculate from the liquid containing paint flocculate being carried out by centrifugation.

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5. A processor for continuously recovering a waste paint comprising:  
a first separation tank for accommodating a booth-circulating water containing paint particles discharged from a paint booth;  
an agent-adding means for adding a dispersing agent and a floatation agent in the first separation tank to float the paint particles by finely  
15 dividing and dispersing them;  
a first taking-out means for taking out a liquid containing the paint flocculate floated in the first separation tank;  
a circulating means for circulating the liquid in the first separation  
20 tank as the booth-circulating water through the paint booth;  
a second separation tank for accommodating the liquid taken out by the taking-out means to roughly separate a liquid containing paint flocculate and a liquid containing no paint flocculate by flocculating the paint particles to form the paint flocculate;

a second taking-out means for taking out the liquid layer containing paint flocculate roughly separated in the second separation tank;

a foreign-matter separating tank for accommodating the liquid layer containing paint flocculate taken out by the second taking-out means;

5 a stirring means for stirring the liquid containing paint flocculate accommodated in the foreign-matter separating tank;

a foreign-matter separating means for removing the foreign-matter floated by stirring using the stirring means from foreign-matter separating tank;

10 a third taking-out means for taking out the paint flocculate having been subjected to the removing treatment of the foreign matter in the foreign-matter separating tank; and

a paint flocculate separation means for separating and recovering the paint flocculate from the liquid containing paint flocculate taken out the  
15 third taking-out means.

6. A processor for continuously recovering a waste paint as defined in claim 5, the foreign-matter separating tank being provided with a scraper for scraping the water surface in the tank.